

Title (en)

POWER CONVERSION DEVICE AND POWER CONVERSION UNIT

Title (de)

LEISTUNGSUMWANDLUNGSVORRICHTUNG UND LEISTUNGSUMWANDLUNGSEINHEIT

Title (fr)

DISPOSITIF DE CONVERSION DE PUISSANCE ET UNITÉ DE CONVERSION DE PUISSANCE

Publication

EP 3787173 A4 20220413 (EN)

Application

EP 18915859 A 20180426

Priority

JP 2018017036 W 20180426

Abstract (en)

[origin: EP3787173A1] A power conversion device includes: a housing having a floor, a ceiling provided above the floor, and a front face, a back face, and a pair of side faces that join the floor and the ceiling; an input circuit part; a power conversion unit; a reactor; and an output circuit part housed inside the housing; and an output terminal provided in the ceiling. The input circuit part, the power conversion unit, the reactor, and the output circuit part are arranged in a planar direction of the front face so as not to overlap each other in a plan view of the front face. The input circuit part is provided above the floor, the output circuit part is provided below the ceiling and above the input circuit part, and the power conversion unit is provided above the input circuit part between the input circuit part and the output circuit part. The reactor is provided beside or above the power conversion unit between the input circuit part and the output circuit part. The input circuit part, the power conversion unit, the reactor, the output circuit part, and the output terminal are connected in series in this order through metal bus bars.

IPC 8 full level

H05K 7/14 (2006.01); **H02G 5/00** (2006.01); **H02M 7/00** (2006.01)

CPC (source: EP US)

H02M 7/003 (2013.01 - EP US); **H05K 7/14325** (2022.08 - EP); **H02M 7/537** (2013.01 - US)

Citation (search report)

- [I] US 2014036418 A1 20140206 - EICHLER MARKUS [DE], et al
- [A] JP 2014233186 A 20141211 - SANYO ELECTRIC CO
- [A] JP 2015070711 A 20150413 - SANYO ELECTRIC CO
- [XA] GB 2539537 A 20161221 - HITACHI LTD [JP]
- [XA] CN 204168155 U 20150218 - SUNGROW POWER SUPPLY CO LTD
- [XA] US 2014111959 A1 20140424 - LI YAN [TW], et al
- See also references of WO 2019207723A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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EP 3787173 A1 20210303; **EP 3787173 A4 20220413**; CN 112055938 A 20201208; CN 112055938 B 20231117; JP 6939987 B2 20210922; JP WO2019207723 A1 20210422; US 12003183 B2 20240604; US 2021242795 A1 20210805; WO 2019207723 A1 20191031

DOCDB simple family (application)

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